



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,692	09/28/2001	Tsutomu Yamada	YKI-0078	4078

23413 7590 11/20/2002

CANTOR COLBURN, LLP  
55 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002

EXAMINER

MULPURI, SAVITRI

ART UNIT	PAPER NUMBER
----------	--------------

2812

DATE MAILED: 11/20/2002

5

Please find below and/or attached an Office communication concerning this application or proceeding.

→

# Office Action Summary

Application No.  
**09/966,692**

Applicant(s)  
**Yamada et al**

Examiner  
**Savitri Mulpuri**

Art Unit  
**2812**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Feb 1, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-8, 10-14, 16-22, and 24-26 is/are rejected.
- 7) ☒ Claim(s) 3, 9, 15, and 23 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 2812

### DETAILED ACTION

This action is in response to the applicant's submission of priority document filed on 2/11/02.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-8, 10-14, 16-22, , 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuzawa et al US 6,459,193 in combination with Tonucci et al US 6,087,274..

Fukuzawa et al teaches forming organic electroluminescent display by the following process steps: Providing a substrate for forming electroluminescent array; providing a shadow mask "220" with plurality of holes over the substrate having pixel "212"; providing electroluminescent material source "240" over the mask. Depositing the electroluminescent material on the substrate by laterally moving the mask each time of the exposure. Fukuzawa does not teach mask being semiconductor material and relative movement of the mask and the substrate.

Tonucci et al teaches depositing nanosize patterning process by providing silicon carbide substrate with plurality holes and depositing the material through holes with accuracy and precision by the relative movement of the mask and the substrate. Tonucci et al further disclose using the position technique for organic materials. (See col. 60-67, fig 2B -2C and 4 claims, 2,

Art Unit: 2812

23, It would have been obvious to one of ordinary skill in the art to use silicon carbide mask with plurality of openings to deposit material over the substrate in the invention of Fukuzawa et al because of the advantage of depositing in large area substrate in small area in the order nanosize with accuracy and precision as taught by Tonucci et al.

Claims 3,9,15,23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. . Ikuko et al teaches method of making organic electroluminescent display by the following process steps: Providing a substrate for forming electroluminescent array; providing a shadow mask "9" with plurality of holes over the substrate; providing electroluminescent material over the mask. Depositing the electroluminescent material on the substrate. In Ikuko et al teaches not moving the substrate, which is improvement to the teaching of moving the substrate in admitted prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mulpuri whose telephone number is 305-5184. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0956..

Application/Control Number: 09/966692

Page 4

Art Unit: 2812

  
SAVITRI MULPURI  
PRIMARY EXAMINER